AMENDMENTS

Listing of Claims:

The following listing of claims replaces all previous listings or versions thereof:

1. (Currently amended) A method for determining the effectiveness of a cancer treatment comprising:

(a) obtaining a non-tumor surrogate tissue sample by non-invasive procedures from a patient undergoing the cancer treatment, wherein the cancer treatment is designed to change growth factor receptor phosphorylation; and

(b) determining growth factor receptor phosphorylation in said tissue before and after the cancer treatment.

2. (Original) The method of claim 1, wherein phosphorylation of an epidermal growth factor receptor, a fibroblast growth factor receptor, an acidic fibroblast growth factor receptor, a basic fibroblast growth factor receptor, an insulin like growth factor receptor, a nerve growth factor receptor, a transforming growth factor α receptor, a transforming growth factor β receptor, a neuregulin receptor, a betacellulin receptor, a amphiregulin receptor, a heparin binding EGF-like growth factor receptor, or a cytokine growth factor receptor is determined.

3. (Original) The method of claim 1, wherein said tissue sample is a hair follicle.

4. (Withdrawn) The method of claim 1, wherein said tissue sample comprises buccal mucosa tissue.

5. (Withdrawn) The method of claim 1, wherein said tissue sample comprises a pap-smear sample.

6. (Withdrawn) The method of claim 1, wherein said tissue sample comprises bladder-wash cells.

7. (Withdrawn) The method of claim 1, wherein said tissue sample comprises skin scrapings.

8. (Original) The method of claim 1, wherein determining growth factor receptor phosphorylation comprises:

(a) obtaining a sample comprising the growth factor receptor;

(b) contacting the sample with an anti-phosphorylated growth factor receptor antibody;

(c) detecting the bound antibody.

9. (Original) The method of claim 8, wherein the antibody further comprises a detectable label.

10. (Original) The method of claim 8, wherein a second antibody that comprises a detectable label is contacted prior to the detection.

11. (Original) The method of claims 9 and 10, wherein the detectable label is selected from a group comprising a fluor, an enzyme, or a radionuclide.

12. (Original) The method of claim 8, wherein said detecting comprises immunoflourescence.

13. (Original) The method of claim 8, wherein said detecting comprises colorimetric detection.

14. (Original) The method of claim 1, wherein the patient has cancer of the breast, prostrate, colon, pancreas, head and neck, bladder, blood, bone, bone marrow, brain, esophagus, gastrointestine, brain, kidney, liver, lung, nasopharynx, ovary, skin, stomach, or uterus.

15.-33. (Canceled)

34. (New) The method of claim 1, wherein said change is a decrease in the growth factor receptor phosphorylation.

35. (New) The method of claim 1, wherein said change is an increase in the growth factor receptor phosphorylation.

36. (New) The method of claim 2, wherein the growth factor receptor is epidermal growth factor receptor.

37. (New) The method of claim 38, wherein said cancer treatment comprises treatment with a chemotherapeutic agent that changes the phosphorylation of a growth factor receptor.

38. (New) The method of claim 37, wherein said chemotherapeutic agent is a protein kinase inhibitor.

39. (New) The method of claim 38, wherein said protein kinase inhibitor is a tyrosine kinase inhibitor.

40. (New) The method of claim 39, wherein said chemotherapeutic agent is PKI166.

41. (New) The method of claim 39, wherein said chemotherapeutic agent is the C225 antibody.

42. (New) The method of claim 38, wherein said protein kinase inhibitor is a serine threonine kinase inhibitor.

43. (New) The method of claim 1, wherein the patient has breast, prostrate, colon, pancreatic, head and neck, renal, bladder, blood, bone, bone marrow, brain, esophagus, gastrointestinal, brain, kidney, liver, lung, nasopharynx, ovary, skin, stomach, or uterine cancer.